

T2i Experience

The Still Photographer's Guide to Operation and Image Creation with the Canon Rebel T2i/EOS 550D



an eBook by:
Douglas J. Klostermann

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Full Stop. *good writing for better photography*

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INTRODUCTION

The Canon EOS Rebel T2i (also known as the EOS 550D) is a powerful, advanced tool for digital photography. With features such as an 18 megapixel sensor, 63-zone dual-layer exposure metering system, high ISO performance expandable up to 12800, and Digic 4 image processor the T2i shares many of the capabilities of Canon's semi-professional models. And with its 3.7 frames per second shooting speed, high resolution rear LCD Monitor, and customization options it has the ability to meet most enthusiast photographers' needs. The Canon Rebel T2i / EOS 550D is a powerful, advanced tool for digital photography and is fully capable of capturing professional quality images in most any situation you wish to use it.

But it is merely a tool.

It is up to you to make use of its features and capabilities to create the images you envision. While the camera's manual can tell you about all the settings and controls and how they function, this guide will build upon that and tell you when and why you might want to use them. Every button, menu item, and custom function of the T2i is there for a reason: to help you capture the images you want. Some of them are more useful to different types of photographers, and you don't need to learn and use them all, but this guide should help to give you the knowledge to confidently use the ones that turn your Canon Rebel T2i into an image capturing tool that works best for you.

There are many different techniques to use a digital SLR (dSLR) camera and its controls to capture images, and I'm not going to attempt to explain them all. I am going to concentrate on the ways that I believe are the most practical, useful, and effective. The settings and techniques I discuss apply to general photography, which includes most travel photography. I encourage you to experiment and find what works best and is most comfortable or intuitive for you.

Since this guide is intended to help you get the most out of your T2i, it will not go into detail about the automatic features and basic modes. The Canon T2i is a sophisticated tool that deserves to be used to its full potential, and that means taking control of the camera and its functions. And since this guide is about image creation – the capturing of a photograph – it will not discuss features that deal with image processing, such as the Creative Filters (which are pretty self-explanatory). And finally, while it will discuss basic video settings and options to get you started, the guide will focus on still photography and image creation. However there is a great deal to be learned about everything else including the autofocus system, the elements of exposure, exposure metering, white balance, and even basic composition.

This guide is designed to be used in conjunction with the camera's manual, not to replace it, so every bit of information in the *Canon EOS Rebel T2i / EOS 550D Instruction Manual* will not be repeated here. For example, I may explain the use of AI Servo auto focus mode, but not necessarily explain how to change this setting on your camera. If you don't know how to change it please read the manual where it will tell you to press the AF Button on the Cross Keys, press the left or right Cross Keys Button until the desired mode appears on the LCD Monitor screen, then press the SET Button. Note that the T2i manual can also be obtained as a PDF file from the Canon website: <http://gd1p01.c-wss.com/gds/9/0300003169/01/eosrt2i-eos550d-im-en.pdf>

As you can see, there is a lot to make sense of regarding terminology and controls, so I recommend that you familiarize yourself with the controls and displays of the camera body, as shown on pages 16-20 of the *Canon EOS Rebel T2i / EOS 550D Instruction Manual*, as well as read through the manual and attempt to understand as much as possible. Yes, much of it may be complicated and confusing at first, but this ebook guide will attempt to cut through the numerous buttons, controls, menus, and settings and concentrate on the essential ones to get you started taking great images.

Various settings of the T2i can be controlled in multiple ways using the menus, Cross Keys, [Q] Button and Quick Control Screen, and Main Dial on the camera body and reading the settings on the Rear LCD Monitor or in the Viewfinder. Explore the options and find the ways that work most quickly and intuitively for you.

Any time I capitalize something in the text, it is a proper term that can be looked up in the *Canon EOS Rebel T2i / EOS 550D Instruction Manual*. I will capitalize the names of actual buttons, controls, camera parts, and menu items, such as Erase Button, Main Dial, LCD Monitor, and Format. Please review the camera diagrams in your T2i manual, pages 16-20, to familiarize yourself with the names of various parts, controls, and displays, as I will use these proper names in this text. Words and phrases that are capitalized *and* bold refer to chapters and sections within this guide. Turn on the bookmarks navigation or contents panel in your PDF reader to quickly navigate to these different sections.

Generally the menu settings and instructions I discuss involve taking full control of the camera for yourself, which means taking it off Auto, off Program AE, off automatically selected auto-focus points, off Auto ISO. While this may be more challenging at first, these are the techniques that are necessary to take full advantage of the capabilities of any digital SLR (dSLR) including the T2i, and will lead to you having more control and consistency over your image making. Consequently this will inevitably lead to better images!

Getting Started

Batteries

The first thing to do, if you haven't done so already, is to fully charge the battery. The first couple times you use it, I recommended that you fully drain it through use before you fully recharge it again. While some claim current batteries don't require this, others claim it prolongs their life or capacity, so it is best to just do this for a couple cycles to be safe. You will probably want a second battery, the LP-E8, so you should get that right away. There is an optional battery pack and grip, the BG-E8 Battery Grip, which will allow you to use two LP-E8 batteries or six AA batteries. The grip also increases the size of the camera which may make it more comfortable for some users, especially when using the camera in the vertical position.

At the end of the book I provide a list of the accessories and items that I mention throughout the text, as well as other **Photography Accessories**, complete with links to Amazon if you wish to view or purchase the items. The list is also available, with Amazon links, on my blog:

<http://dojoklo.wordpress.com/2011/02/10/gear-accessories-and-books/>

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Auto Lighting Optimizer

Disable so that the camera isn't doing something with your exposures without you having control over it. Hopefully after reading this guide you will know how to meter, read your histogram, and use **Exposure Compensation** to make proper exposures. This feature will be discussed a bit more in the **Highlight Tone Priority and Auto Lighting Optimizer** section.

Metering Mode

Metering modes will be discussed in detail in the **Metering Modes** section of this guide. For now, leave it on the default, *Evaluative Metering*. Put this item in **My Menu** in order to access it easily.

Custom White Balance

This is for setting a custom white balance rather than using one of the standard White Balance (WB) settings like Cloudy or Fluorescent. For advanced users. Particularly handy for studio work where the lighting will remain constant or in a situation with difficult mixed lighting. This will be covered in the **White Balance** section.

WB Shift/BKT

This is White Balance Shift and White Balance Bracketing. Also for advanced users. Used for adjusting to a very precise WB, or bracketing exposures using different WB settings.

Color Space

Leave on *sRGB*. Read the various blogs, forums and books that endlessly debate sRGB vs. AdobeRGB. Then continue to leave it on sRGB. sRGB is a slightly smaller color space than AdobeRGB, but will display properly on computer screens and printers. AdobeRGB is intended for uses like commercial printing. Unless you are calibrating your monitor, printing with a printer that has 6 or more ink cartridges, shooting for a commercially printed publication, and/ or well versed in setting color spaces in Photoshop and printing, you will never miss the difference and *AdobeRGB* will possibly not display or print properly.

Picture Style

User preference for those shooting JPEGs. Not needed if you shoot in RAW because the selected style applies to JPEG files only, although please note that the Picture Style you set applies to the images you see on the rear LCD Monitor *even* if you are shooting in only RAW. So the exposure shown on the LCD Monitor may not be the same as the exposure captured in the RAW files. Therefore it is somewhat important that you leave this set at *Standard* (or *Neutral*) if you shoot RAW. Also choose Standard or Neutral if you shoot JPEGs but plan to edit in Photoshop later. More on setting and customizing **Picture Styles** in a later section.

Shooting 3 menu

Dust Delete Data

This feature uses a reference image to process out dust spots from your image files. Hopefully you won't need this because your sensor stays clean with the camera's automatic sensor cleaning.

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off. If you sometimes take them, I suggest you set it on 1 so that it functions when you need it to.

recommend: 1

C.Fn II-5

High ISO Speed Noise Reduction: This, obviously, reduces noise that appears due to using high ISO speeds. This type of noise appears at all shutter speeds when using high ISO settings, so it is not the same as the above setting. You should try to avoid high ISO speeds (1600 or above) but I think you will find the T2i produces acceptable noise at 1600 and often even at 3200. Decide if you wish to have the camera do this in-camera or if you wish to do it in post-processing. If you decide to use this, experiment to see which level you prefer. In the mean time, set it for 0: Standard. Note that setting it for Strong will decrease your maximum burst capability.

recommend: 0

C.Fn II-6

Highlight Tone Priority: This setting improves the details seen in highlights and helps prevent them from being overexposed or blown-out. It shifts the dynamic range to the brighter end, so you sacrifice some detail in the shadows. It is worth using in certain situations, such as photographing a wedding dress or something very bright or high key where you don't wish to lose the subtle details. However, you probably don't want it on all the time. I would put it in **My Menu** so you remember it is there to use when you need it. Note that when you enable this, the camera will disable Auto Lighting Optimizer and will limit your ISO range to 200-6400. This will be discussed a little bit more in the **Highlight Tone Priority and Auto Lighting Optimizer** section.

recommend: 0 - but put in My Menu

C.Fn III: Autofocus/ Drive

C.Fn III-7

AF-Assist Beam Firing: This setting is to enable or disable the autofocus assist beam, which is a flash of light emitted from the internal or external flash to help the camera focus on the subject. I suggest enabling it, setting 0, unless you are in a situation where it is too distracting in some way. If you never use the internal flash and just a Speedlite, set it on 2: *Enable external flash only* or 3: *IR AF assist beam only* which will only use the infrared AF-assist beam and not the series of small flashes of light. Make sure the Speedlite's custom functions have it turned on too.

recommend: 0

C.Fn III-8

Mirror Lockup: This is the mirror lockup that you might have read about from landscape and macro photographers. By enabling it you reduce that extra little bit of vibration that may cause slight blurring with a long lens or a macro lens. It is only worth using in conjunction with a remote shutter release or the self timer, and a tripod. You definitely don't want to use it all the time, so disable it, and put it in your **My Menu** if you need it sometimes. This is *not* the feature to use to raise your mirror for manual sensor cleaning. That feature is under Sensor Cleaning in the Set-up 2 Menu. More about **Sensor Cleaning** later. - *recommend: 0*

Focusing

Using Auto Focus

One of the essential steps in taking a successful photo is controlling where the camera focuses. If you allow the camera to auto focus by choosing its own focus point(s), it typically focuses on the closest object. This may or may not be what you want to focus on. So you should select where the camera focuses using the Auto Focus Points. This does not mean you have to manually focus the camera, it means you tell the camera exactly where to auto focus. Select an Auto Focus Point, or AF Point, using the AF Point Selection Button and the Cross Keys. Use the center SET Button to choose the center AF Point.

Note: I use the term “*recompose*” throughout the text. By this I mean moving the camera after you have locked-in the focus or exposure but before you click the shutter and take the picture. This means that what you see in the viewfinder changes from when you do those first actions to when you take the picture - You have *re-composed* the view you see in the viewfinder.

To see how autofocus point selection works, make sure the switch on your lens is set to AF and your Autofocus Mode, as seen on the Quick Control Screen, is set to One Shot, then:

- Tap the Shutter Button with a half-press to wake up the camera.
- Looking through the viewfinder, tap the AF Point Selection Button with your thumb and then use the Cross Keys to select the focus point that is nearest to where you want to focus.
- Place that point over your intended subject.
- Press and hold the Shutter Button halfway down and see that point blink red. The Focus Confirmation Light should light up in your viewfinder. You have locked the focus.
- Keeping the Shutter Button pressed halfway, recompose if necessary, and take the shot by fully pressing the Shutter Button.

You can also turn the Main Dial after pressing the AF Point Selection Button to select an AF Point. Pressing the SET button a second time after pressing the AF Point Selection Button will activate automatic AF Point selection and you will see all the AF Points light up. Press SET again to return to just the center point, or press one of the Cross Keys to select another single AF Point.

There are reasons to use the outer focus points and not just the center one all the time, which will be discussed later. It may sound difficult to select the focus point each time, but it is actually very quickly done and will become instinctive. You may even start to set your focus point as you approach a scene before even bringing your camera to your eye. But if you wish, you can start by always using the center point and recomposing before taking the shot.

If the Focus Confirmation Light does not light up and the camera does not take the photo, the camera may not be finding something to focus on or you may be too close to your subject for the lens to focus. Auto focus works by looking for contrast, so try focusing on a detail with a strong line or strong contrast between light and dark. It may not be able to focus on a large area of consistent color or a subject that is too dark. It can be disrupted by regular patterns or confused

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when looking through close objects to objects farther away, such as looking through a screen. **When photographing people, always try to focus somewhere on the face, ideally on the eyes or eyebrows.**

Focus Modes

The T2i has different focus modes to choose from, typically depending if your subject is still or moving, or if you wish to track its movement.

One-Shot AF

Use this mode when your subject is still and not going to move, or if your subject is not going to move very much, or if the distance between you and the subject is not going to change between the time you lock focus, recompose, and take the shot. Lock focus on the subject and recompose if necessary. I actually use this mode most all of the time, even if taking photos of moving people or objects. This is because I typically recompose once I've focused on the subject, so the focus point is no longer on the subject and thus would not be able to track its movement.

AI Servo

Use this mode when your subject is moving. If the subject is moving towards you or away from you, the camera will keep evaluating the focus distance *as long as the subject remains under the focus point that was originally active* and the Shutter Button is kept half-pressed. If the subject is going to be moving across your field of view, set the camera to automatically select the focus point (this is one of the few times you will not be manually selecting the auto focus point), focus on the moving subject with the center focus point, and then as long as the Shutter Button remains half-pressed the camera will track the subject to the other focus points if it moves to them. As you will see, when using AI Servo mode your compositions are often dictated by the position of the autofocus points in your viewfinder. Becoming skilled at quickly using One-Shot AF even in action situations will give you much more ability to control your compositions.

AI Focus

This mode is a hybrid of the two other focus modes. It starts in One-Shot AF mode then changes to AI Servo mode if your subject starts moving. Why shouldn't you use this all the time, then? Well, if you are focusing and then recomposing, as you may often be doing, your movement of the camera may fool it into thinking that the subject is moving and your resulting focus may not be as accurate as it could have been with One-Shot AF.

How do you remember which mode is which since the terms "AI Servo" and "AI Focus" tell you nothing that makes sense? Although I listed them in a different order above to explain them more easily, on your camera's Quick Control Screen they are listed:

ONE SHOT / AI FOCUS / AI SERVO

Remember that *One-Shot AF* just focuses once and doesn't change once you lock it in, and *AI Servo AF* is the other extreme – continuous focus used for moving objects. And *AI Focus AF* is listed in the middle, between the two, because it is the hybrid, combination of the two.

What Readers are Saying about T2i Experience

Best Guide to using a T2i - I don't know how I could fully take advantage of all the features the T2i has to offer without this publication! It's well-organized, easy to understand, and succinct enough to keep your attention while still containing a wealth of tips and tricks to get the most out of your camera. I'm very happy that I found this guide.

-Nathan K.

Essential Travel Companion - Alas, a comprehensive and concise guide for hobbyists who desire to enhance their photography experiences. I highly recommend this guide to anyone who wants to ease out of auto mode and learn how to take high-quality photos. It brilliantly explains how to apply advanced techniques and tips, walks you through the daunting task of menu settings, and smoothly guides you through the image-taking process. The instructions and brief explanations are easy to follow and well organized. The guide is a portable class on digital photography! A must-have if you want to learn how to use your camera to its fullest advantage.

-Elizabeth J.

A Fantastic Book For T2i Users - This book has exactly the no frills condensed practical advice on camera settings that I was looking for. The author has a gift for separating the wheat from the chaff. I didn't have a clue how to operate a digital camera, let alone know the definition of the technical terms. After reading this book, I now understand all the critical functions of the Canon T2i and how to take advantage of them. This is a book I plan to keep handy for years to come.

-TP

What Readers are Saying about Doug's Other dSLR User's Guides:

This book, together with the manual that came with your camera, is all you need to start discovering all the potential of this camera.

-Max M.

It's the first guide I've read which has taken me through all the settings in an understandable way. I now feel that I have control over the camera

-Peter S.

I would recommend this to anyone who wants to get a quick start to using their camera. Manuals are nice, but this eBook highlights the important information and gives a quick easy to understand explanation of most all of the functions and controls.

-Ray M.

This manual is a clearly written, concise and useful explanation of the rationale for the seemingly infinite and often confusing settings options. Used in conjunction with the (camera's) manual I feel a bit more confident in understanding how to at last proceed in getting better photographs.

-WLS

Learn more and purchase *Canon T3i Experience* here:
http://www.dojoklo.com/Full_Stop/T2i_Experience.htm